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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,765	03/24/2004	Gregory W. Schrader	11-12539 (56051-DIV)	4281
27975	7590	10/21/2005	EXAMINER	
ALLEN, DYER, DOPPELT, MILBRATH & GILCHRIST P.A. 1401 CITRUS CENTER 255 SOUTH ORANGE AVENUE P.O. BOX 3791 ORLANDO, FL 32802-3791			RODRIGUEZ, JOSEPH C	
			ART UNIT	PAPER NUMBER
			3653	

DATE MAILED: 10/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/807,765	<b>Applicant(s)</b> SCHRADER, GREGORY W.	
	<b>Examiner</b> Joseph C. Rodriguez	<b>Art Unit</b> 3653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 18-32 is/are pending in the application.
- 4a) Of the above claim(s) 26-32 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 18-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

***Final Rejection***

Applicant's arguments filed 8/15/05 have been fully considered but they are not persuasive for reasons detailed below.

The prior art rejections are maintained or modified as follows:

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 18-20 and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over King et al. ("King")(US 3,756,404) in view of Heck et al. ("Heck")(US 5,485,002).

King (Abstract; fig. 1 showing use of photodiodes to receive image data of one side of the planar product slurry; col. 1, ln. 10-22; col. 2, ln. 62-col. 4, ln. 22 teaching use of air blasts to divert reject slurry) teaches all that is claimed except for expressly teaching acquiring imaging data with a camera. Further, under an alternative interpretation, King may not teach the feature of a predetermined range of wavelengths. Heck, however, teaches using a scanning camera (30) to detect defects in fruit by scanning a surface of said fruit (Abstract) and also teaches that it is known to use a specific frequency to create a better image for the camera (col. 9, ln. 23-67). Moreover, Heck teaches that the use of a scanning camera and the associated system provides

Art Unit: 3653

more accurate image data to examine defects in citrus fruit (col. 1, ln. 16-col. 2, ln. 63). Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to replace the photodiode feature of King with the camera system taught by Heck to obtain a more accurate sorting device.

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over King in view of Heck as applied to claims 18-20 and 22-24 above, and further in view of Fraenkel et al. ("Fraenkel")(US 4,203,522).

King and Heck as set forth above teaches all that is claimed except for expressly teaching the step of illuminating within a predetermined range of wavelength to cause defects to fluoresce. Fraenkel, however, teaches that it is well known in the food sorting arts to detect mold by using certain wavelengths to cause the mold to fluoresce (col. 1, ln. 49 et seq.). Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the invention of King and Heck by using certain wavelengths to ensure the detection of mold.

Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over King in view of Heck as applied to claims 18-20 and 22-24 above, and further in view of what is well known in the art.

King and Heck as set forth above teaches all that is claimed except for expressly teaching a mechanical diverter. This feature, however, is a well known equivalent to the air blast diverter taught above and Examiner takes Official Notice of such. Therefore, it

Art Unit: 3653

would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the invention of King and Heck as is well known in the art.

### ***Response to Arguments***

Applicant's arguments that the prior art fails to teach the claimed features are unpersuasive. In particular, Applicant attempts to distinguish the Heck reference by arguing that Heck images all surfaces of an object in contrast to the one side of a planar flow claimed by Applicant and by arguing that Heck teaches away by using complicated camera, optics, and mirror technology. Here, it is noted that King already teaches forming a planar slurry and using photodiodes to measure visual defects illuminated by fiber optic elements located on the opposite side of the slurry from the photodiodes. This is strikingly similar to Applicant's invention except for the use of an imaging camera (Cf. Applicant's fig. 2, 3). Thus, as King already teaches the feature of extracting image data from one side of a planar slurry, Heck is merely relied on to demonstrate that the use of an imaging camera would be obvious to one with ordinary skill in the art. Thus, it is not patentability relevant that Heck functions by imaging a 3-D object as Heck simply demonstrates the skill level in surface imaging technology. Further, if the skill level is sufficient to scan and image the surface of a 3-D object, it is clearly sufficient, as well as obvious, to conduct a surface scan of a planar surface. Moreover, Heck functions by illuminating a surface of a citrus object and conducting a detailed image analysis of the illuminated surface, thus Heck does not suggest imaging both surfaces of the slurry as

Art Unit: 3653

suggested by Applicant, does not teach away from Applicant's invention and is clearly applicable. Consequently, as Applicant's arguments distinguishing the prior art are unpersuasive, the claims stand rejected.

### ***Election/Restrictions***

Newly submitted claims 26-32 are directed to an invention that is independent or distinct from the invention originally claimed on the basis of method-apparatus as the method claim may be practiced by a materially different apparatus (e.g., an apparatus with different imaging devices). Further, the newly submitted claims present a burden by being presented after the first action and thus requiring a new search across multiple classes.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 26-32 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Examiner has maintained the prior art rejections, statutory rejections and drawing objections as previously stated and as modified above. Applicant's amendment necessitated any new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the

extension of time policy as set forth in 37 CFR 1.136(a). The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

### ***Conclusion***

Any references not explicitly discussed above but made of record are considered relevant to the prosecution of the instant application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Joseph C Rodriguez** whose telephone number is **571-272-6942** (M-F, 9 am – 6 pm, EST).

The **Official** fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

The examiner's **UNOFFICIAL Personal fax number** is **571-273-6942**.

Further, information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system.

Status information for published applications may be obtained from either Private PMR or Public PAIR. Status information for unpublished applications is available through Private PMR only.

For more information about the PAIR system, see

<http://pair-direct.uspto.gov>

Should you have questions on access to the Private PMR system, contact the Electronic Business Center (EBC) at **866-217-9197** (Toll Free).

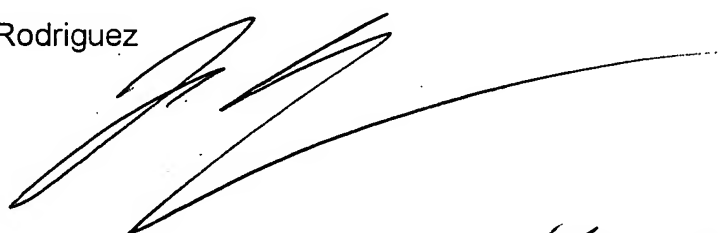
Alternatively, inquiries of a general nature or relating to the status of this application or proceeding can also be directed to the **Receptionist** whose telephone number is **571-272-6584**. Further, the supervisor's contact information is Donald Walsh, 571-272-6944.


Signed by Examiner Joseph Rodriguez

Jcr

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October 15, 2005



  
DONALD Z. WALSH  
SUPERVISORY PATENT EXAMINER  
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